CLAIMS.

We claim:

1. A method of object recognition on a bit-mapped image, comprising

5   parsing the image into regions,

identifying text and non-text regions,

recognition of objects,

preliminarily assigning at least one graphical structure

comprising more then one primary graphical unit to be used as a

10   standard element that may compose as a part at least one

recognized object,

preliminarily describing at least one recognized object as a

set of said standard elements of at least one type along with

spatially parametrical correlations thereof,

15   performing the following steps

search and identification of at least one standard element

on the said bit-mapped image,

selection of at least one standard element image for testing

on belonging to the recognized object,

20   setting up and testing a hypothesis about the recognized

object on the basis of the image formed by all aggregate of

said selected standard element images as a whole taking into

account spatially parametrical correlations thereof.

2. A method of character recognition on a bit mapped image,

25 comprising

parsing the image into regions,

identifying text and non-text regions,

identifying regions containing characters,

recognition of characters,

30   preliminarily assigning at least one type of graphical

structure comprising more then one primary graphical unit to be

used as a standard element that may compose as a part at least one recognized character,

preliminarily describing at least one recognized character as a set of said standard elements of at least one type along with

5   spatially parametrical correlations thereof,

performing the following steps

search and identification of at least one standard element on the said bit-mapped image,

selection of all standard elements in the region presumably

10   containing image of character for testing on belonging to a recognized character,

setting up and testing a hypothesis about the recognized character using the image formed by all aggregate of said selected standard elements as a whole taking into account

15   spatially parametrical correlations thereof.

3. The method as recited in claims 1 or 2, wherein at least one standard element composing the recognized object is described as an alternative.

4. The method as recited in claims 1 or 2, wherein the set of

20 standard elements composing the recognized object is described as an alternative.

5. The method as recited in claims 1 or 2, wherein at least one standard element composing the recognized object is described as an interval.

25   6. The method as recited in claims 1 or 2, wherein the image at least partly contain standard elements connected by relations of mathematical logic.

7. The method as recited in claims 1 or 2, wherein the step of recognized image identification as a standard elements aggregate

30 additionally comprise

- analysis of elements connected by relation of "AND" type,

- analysis of elements connected by relation of "OR" type,

- analysis of elements connected by relation of "NOT" type.

8. The method as recited in claims 1 or 2, wherein said
5 standard elements correlations in the recognized object are
expressed in the form of more then single-level structure.

9. The method as recited in claims 1 or 2, wherein said
standard elements at least partly contain portions of white
color.

10   10. The method as recited in claims 1 or 2, wherein said
standard elements at least partly contain transparent portions.

11. The method as recited in claims 1 or 2, wherein in the case
of ambiguous result of hypotheses setting up and testing a
supplementary information is used.

15   12. The method as recited in claims 1 or 2, wherein in the case
of ambiguous result of hypotheses setting up and testing
supplementary recognition methods are used.

13. The method as recited in claims 1 or 2, wherein the said
standard element is composed of more prime standard elements of
20 at least one type.

14. The method as recited in claims 1 or 2, wherein the
description of a recognized object as a set of standard elements
and spatially parametrical correlation thereof is placed into the
special means for storage and search.

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